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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,092	04/28/2005	Philippe Desbois	12810-00073-US	2298
30678 7590 05/17/2007 CONNOLLY BOVE LODGE & HUTZ LLP P.O. BOX 2207			EXAMINER	
			ASINOVSKY, OLGA	
WILMINGTON, DE 19899-2207		•	ART UNIT	PAPER NUMBER
			1711	(1)
			MAIL DATE	DELIVERY MODE
			05/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			$\mathcal{D}$			
	Application No.	Applicant(s)	<u> </u>			
	10/533,092	DESBOIS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Olga Asinovsky	1711				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION  .136(a). In no event, however, may a reply be tind  d will apply and will expire SIX (6) MONTHS from te. cause the application to become ABANDONE	N. mely filed  n the mailing date of this communication. FD. (35 U.S.C. & 133)				
Status						
1) Responsive to communication(s) filed on 28 A	April_2005.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	-			
Disposition of Claims						
<ul> <li>4) Claim(s) 1-20 is/are pending in the application</li> <li>4a) Of the above claim(s) is/are withdra</li> <li>5) Claim(s) is/are allowed.</li> </ul>						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9) The specification is objected to by the Examina	er.					
10) The drawing(s) filed on is/are: a) acc		Examiner.				
Applicant may not request that any objection to the	•					
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is ob	pjected to. See 37 CFR 1.121(d).				
11) ☐ The oath or declaration is objected to by the E						
Priority under 35 U.S.C. § 119						
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea	nts have been received. Its have been received in Applicationity documents have been received in (PCT Rule 17.2(a)).	ion No ed in this National Stage				
* See the attached detailed Office action for a list	of the certified copies not receive	∍d.				
Notice of References Cited (PTO-892)	4) Interview Summary	/DTO 412)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
I) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 4/28/2005	5) Notice of Informal P	'atent Application				

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Application/Control Number: 10/533,092

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## **DETAILED ACTION**

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## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latsch et al U.S. Patent 6,303,721 or Fischer et al U.S.Patent 6,444,762, or Fischer et al U.S. Patent 6,399,703, or Desbois et al U.S. Patent 6,410,654, or Desbois et al U.S. Patent 6,686,423, or Schade et al U.S.Patent 6,350,834.

Each of these references discloses an anionic polymerization process of vinylaromatic monomer=styrene monomer in the presence of a homopolybutadiene rubber or styrene-butadiene rubber for producing a high impact polystyrene. A process is carried out by polymerization of diene monomer for producing a soft phase in the presence of an anionic polymerization initiator such as organolithium compound, than styrene monomer is added stepwise or continuously in the presence of an anionic polymerization initiator such as organolithium compound and metal alkyl catalyst RnM, wherein M is magnesium, aluminum, boron or zinc: Latsch'721, column 4, lines 5-15; Fischer'762, column 4, lines 24-44; Fischer'703, column 5, line 19; Desbois'654, column 3, lines 34-50; Desbois'423, column 3, lines 56-59; Schade'834, column 3, lines 30-60, column 2, line 45, column 8, line 57. The catalyst system can be selected for being Li/Al catalyst.

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It would have been obvious to one of ordinary skill in the art to use a process for producing high impact polystyrene in any of the cited reference invention wherein an aluminum alkyl catalyst is selected for polymerization of styrene monomer for producing a matrix polystyrene in the presence of rubber latex, and, thereby, obtain the claimed requirement, because the metal alkyl catalysts work equally well within the adequate results without any unexpected results.

## Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References have been considered.

4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

0,A May 13, 2007 Olga Asinovsky Examiner Art Unit 1711

James J. Seidleck Supervisory Patent Examiner Technology Center 1700